1.111 Attorney Docket No.: Q91508

AMENDMENT UNDER 37 C.F.R. § 1.111 Application No.: 10/562,005

REMARKS

Claims 1-24 are all the claims pending in the application. Claims 3 and 24 have been amended for purposes of clarity. Claim 4 has been amended to correct a typographical error. The specification has been amended to insert headings.

Entry of the above amendments is respectfully requested.

I. Response to Rejection of claim 24 under 35 U.S.C. § 101

Claim 24 is rejected under 35 U.S.C. § 101 as allegedly being directed to non-statutory subject matter. Without acquiescing the merits of the rejection, claim 24 has been amended for purposes of clarity, and thus it is respectfully submitted that the rejection be withdrawn.

II. Response to Rejection of claim 3 under 35 U.S.C. § 112, second paragraph

Claim 3 is rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Without acquiescing the merits of the rejection, claim 3 has been amended for purposes of further clarity. *See e.g.*, page 4, line 6. Accordingly, it is respectfully submitted that the meaning and scope of claim 3 is clear and thus, withdrawal of the rejection is respectfully requested.

III. Response to Rejection of claims 1-23 under 35 U.S.C. § 103(a)

Claims 1-14 and 17-23 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ito et al. (US 4,690,856) in view of Ohmae et al. (US 5,047,479) and Saito et al. (US 4,429,076).

In addition, claims 15-16 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Ito et al. in view of Ohmae et al. and Saito et al.

Applicants respectfully traverse the rejections.

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q91508

Application No.: 10/562,005

The Examiner asserts that Ito teaches all of the claimed features of claims 1, 2, 4-10, 13, 14 and 21-23, except for the reactive copolymer. The Examiner considers that it would have been obvious to add an epoxy compound to the adhesive composition of Ito since Ohmae teaches that compositions comprising such compounds have improved mechanical properties.

Applicants respectfully disagree.

Ito discloses a metal laminate comprising a polyamide adhesive composition comprising polyamide and a polyolefin copolymer modified with an unsaturated compound such as maleic anhydride.

Ohmae discloses a thermoplastic resin composition obtained (1) by polymerization of a polyamide resin and of an ethylene copolymer comprising an ethylene unit, an alkyl α , β -unsaturated carboxylate unit and maleic anhydride, then (2) by partial crosslinking reaction of the resulting composition with a polyfunctional compound having reactivity to a carboxyl group, a carboxylic anhydride group or an amino group. *See* col. 2, lines 1-15. The use of an epoxy resin as the polyfunctional compound is taught among many other compounds. *See* col. 4, line 56.

The composition according to Ohmae is described as exhibiting an excellent impact resistance as well as good mechanical properties, such as heat resistance and rigidity. *See* col. 1, lines 56-68. In addition, Ohmae teaches that a minimum amount of polyfunctional compound should be added in order to improve the mechanical properties of the compositions. *See* col. 7, lines 7-10. In this connection, one of ordinary skill in the art may be led to add a polyfunctional compound to improve the mechanical properties of the compositions.

However, no mention is made of the adhesive properties of the composition in Ohmae.

This is not surprising since Ohmae does not teach applying the composition to metal sheet or its

AMENDMENT UNDER 37 C.F.R. § 1.111 Attorney Docket No.: Q91508

Application No.: 10/562,005

use for the manufacture of automotive body parts. Ohmae thus does not refer at all to laminates nor adhesive polymers.

In contrast, in the present invention, the reactive copolymer is added to the adhesive polymer layer in order to improve the adhesion properties. *See* page 10, lines 21 of the present specification.

Accordingly, one of ordinary skill in the art is not led or motivated to add a polyfunctional compound to the composition of Ito in order to improve the adhesive properties.

Thus, for at least the above reasons, it is respectfully submitted that Ito and Ohmae do not render the present invention according to claim 1 obvious.

Furthermore, claims 2-24 depend from claim 1 and thus, it is respectfully submitted that these claims are patentable for at least the same reasons as claim 1.

Moreover, with respect to claims 15 and 16, Saito discloses a thermoplastic polymer composition comprising:

- a) a modified block copolymer of an aromatic vinyl compound and a conjugated diene compound containing dicarboxylic acid groups, such as obtained from maleic acid. *See* col. 6, line 8.
- b) a thermoplastic polymer having polar groups, such as polyamide. *See* col. 2, lines 18-37.
- c) optionally styrene polymers and polyolefins (*see* col. 2, lines 44-48), such as styrene-maleic anhydride copolymers. *See* col. 15, line 52.

Ethylene is mentioned as possible, albeit not one of the preferred conjugated diene compound for component (a). *See* col. 4, lines 39-41. The modified block copolymer (a) furthermore also contains a vinyl compound, and therefore does not read on the copolymer of ethylene as claimed.

In addition, styrene polymers and polyolefins are optionally added. Styrene-maleic anhydride copolymers are listed among other compounds. Thus, one of ordinary skill in the art

Attorney Docket No.: Q91508 AMENDMENT UNDER 37 C.F.R. § 1.111

Application No.: 10/562,005

is not motivated to specifically choose the claimed copolymer from among the list of

compounds.

Accordingly, it is respectfully submitted that the present invention according to claim 1

or the claims depending therefrom are not obvious in view of Ito, Ohmae and/or Saito.

In view of the above, withdrawal of the rejection is respectfully requested.

IV. **Conclusion**

For the foregoing reasons, reconsideration and allowance of claims 1-24 is respectfully

requested.

If any points remain in issue which the Examiner feels may be best resolved through a

personal or telephone interview, the Examiner is kindly requested to contact the undersigned at

the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue

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Respectfully submitted,

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10